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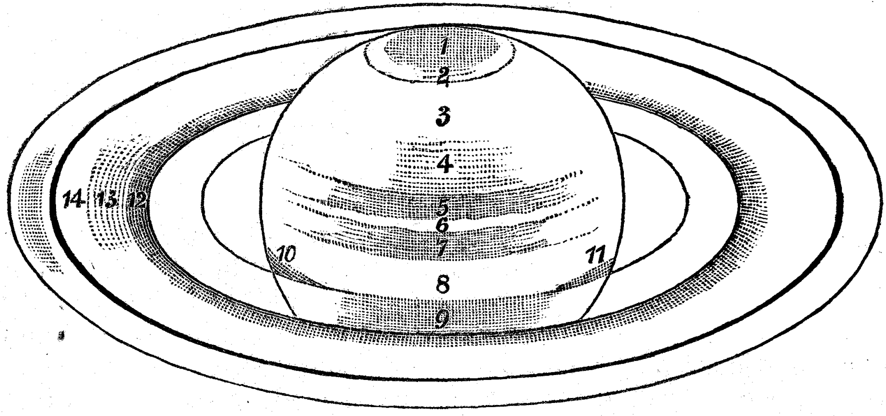
Observations of Saturn. By N. E. Green.

The position of *Saturn* during the opposition now past having been most favourable for viewing the ring system, it will not be out of place to put on record the details of the planet as seen by the aid of an 18-inch reflector.

The mirror employed was figured by Mr. G. With, of Hereford, and is of the finest defining quality; the powers used varied from 250 to 400.

Many studies of the planet were made between Nov. 1884 and Feb. 1885, giving the following results:—



No. 1. South Polar cap, dark gray.
2. Very faint extension of the gray of pole, slightly yellower.
3. Broad band of yellowish-gray light.
4. Broad belt of slightly deeper colour.
5. A well marked narrow dark-gray belt.
6. Very narrow belt of yellowish light, irregular in outline.
7. The darkest belt on the ball, colour warm gray.
8. Equatorial light, very bright in the centre.
9. The edge of the dusky ring, the shade of which is increased by a dark belt on the northern side of the equatorial light. Portions of this belt are seen at 10 and 11; the resulting colour being a blue-gray darker than belt 7.

Details of Rings.

The Dusky Ring.—This extends nearly half-way from the inner edge of the inner ring to the body of the planet, and is bounded by a definite line on the edge nearest the ball.

The Inner Ring.—The inner ring is divided into three zones. The most narrow of these, No. 12, fades gradually into the dusky ring, and is warm in colour. The middle zone is the broadest, and shines with a subdued yellow light; it is bounded

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distinctly by the bright zone No. 14, the most brilliant portion of the system.

Cassini's Division.—This division has varied in distinctness, being sometimes better seen either on the eastern or the western ansa.

The Outer Ring.—This ring is the great difficulty of the planet, requiring an opportunity of the most choice kind to determine its markings. The lightest portion is certainly on the side next Cassini's division, but does not come close to it, and on the exterior next the sky there is also a faint line of light. This causes an appearance of shade through the central portion of the ring, but no indication of Encke's division could be detected.

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Mr. Green has presented to the Society a drawing of *Saturn*, as observed by him in 1884.

Observations of Comet 1884 *III. (Wolf) at Harrow.*

By G. L. Tupman.

The observations were taken with crossed-bar reticule on the 4½-inch equatorial, and power 66. The zero reading of the position circle was carefully determined on eleven nights by a star near the Meridian. The comet had always a well-defined, almost stellar nucleus, which could be very accurately observed. The disappearances and reappearances at the edges of the bars at each transit have been considered as forming a single comparison. The comparisons on Oct. 22, 26, Nov. 18 to end were registered on the chronograph; the others were made by eye and ear. The differences of R.A. and of Declination have been corrected for defective orientation and error of perpendicularity of the bars, for the comet's geocentric motion, and for refraction.

For the parallaxes, log. Δ has been taken from the Ephemeris by Dr. Krueger in the *Astronomische Nachrichten*, with mean solar parallax $8''\cdot83$.

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